



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,354	10/17/2000	Risto Miikkulainen	800550	3110

34456 7590 03/24/2004  
TOLER & LARSON & ABEL L.L.P.  
5000 PLAZA ON THE LAKE STE 265  
AUSTIN, TX 78746

EXAMINER

HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
----------	--------------

2121

DATE MAILED: 03/24/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/690,354

Applicant(s)

MIIKKULAINEN ET AL.

Examiner

Joseph P. Hirl

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-72 are pending in this application.

2. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

3. Examiner's Opinion:

Para 2 above applies. This disclosure has a significant fault in that it incorporates a user in such a fashion that there is a significant violation of US 101/112 in the form of a lack of concreteness. . The claims are centered around a user's prediction based on selected data (processed or otherwise) and since the user is human, it is known that the user's prediction at time  $t_1$  maybe different from that at time  $t_2$  under conditions wherein the data,  $d_1$ , at time  $t_1$  and the data,  $d_2$ , at time,  $t_2$ , are identical. This potential uncertainty raises the question of repeatability which violates the concept of concreteness. The consequence is non-statutory.

***Abstract***

4. The abstract is objected to because of the uncertainty of who the "user" is. Is the "user" the analyst or the patient? The entire abstract needs attention to clearly establish the functionality of the user. Lines 7-8 and 11 raise a great deal of uncertainty... "of the individual user". The following USC 35 101/112 concerns must also be addressed.

These objections must be corrected.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-72 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The practical application test requires that a useful, concrete and tangible result, tangible embodied in the technological arts must be accomplished. The claims are centered around a user's prediction based on selected data (processed or otherwise) and since the user is human, it is known that the user's prediction at time  $t_1$  maybe different from that at time  $t_2$  under conditions wherein the data,  $d_1$ , at time  $t_1$  and the data,  $d_2$ , at time,  $t_2$ , are identical. This potential uncertainty raises the question of repeatability which violates the concept of concreteness. The consequence is non-statutory.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:
8. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
9. Claims 1-72 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."; In re Kirk, '376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-72 are rejected on this basis.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

11. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

12. Examiner's Note (EN): While all 72 claims bear on the "user specific" problem, claims 1, 4, 6, 9, 10, 13, 16, 17, 20, 21, 24, 27, 29, 32, 33, 35, 36, 38, 42, 45-48, 50-57, 59, 61-64 cannot be separated from either the explicitly "user specific" or the inherently "user specific" such that the Examiner cannot reasonably determine how such claims might be changed by the applicant to fully comply with the USC 101/112 rejections. These claims have not been further examined.

13. Dependent Claims 2, 3, 5, 7, 8, 11, 12, 14, 15, 18, 19, 22, 23, 25, 26, 28, 30, 31, 34, 37, 39, 40, 41, 43, 44, 49, 58, 60, and 65-72 have been separated from the "user specific" problem and have been accordingly reviewed. They are rejected under 35

U.S.C. 102(e) as being anticipated by Bishop et al (U.S. Patent 6,090,044, referred to as **Bishop**).

**Claims 2, 14, 25, 40, 69**

Bishop anticipates the step of receiving data further comprises receiving data via a wireless communication means (**Bishop**, c 4, l 24-25, c 6, 40-58).

**Claims 3, 15, 26, 41, 70**

Bishop anticipates the wireless communication means is chosen from a group consisting of infrared signals, radio signals, and pulse codes (**Bishop**, c 4, l 55-58).

**Claims 5, 28, 49, 58, 72**

Bishop anticipates updating at least one learning module chosen from a group consisting of behavioral models, rule based algorithms, learning-based algorithms, and neural networks (**Bishop**, c 4, l 54-64).

**Claims 7, 18, 30, 43, 65**

Bishop anticipates implemented on at least one portable computing device (**Bishop**, c 9, l 4-7).

**Claims 8, 19, 31, 44**

Bishop anticipates the method is implemented on a host computer (**Bishop**, c 6, l 40-44); the host computer receives data from at least one portable computing device (**Bishop**, c 6, l 40-44); and the at least one portable computing device receives and displays output from the host computer (**Bishop**, c 6, l 40-44; EN: para 2 above applies; a host computer is the main computer system for Fig. 1).

**Claims 11, 22, 34, 60, 71**

Bishop anticipates displaying an electronic medical chart graphical user interface (**Bishop**, c 8, l 17-30; to one of ordinary skill in the art, the display will be a standard GUI type).

**Claims 12, 23, 37**

Bishop anticipates a software program, embodied on a computer-readable medium, incorporating the method recited in Claim 1 (**Bishop**, c 4, l 13-25).

**Claim 39**

Bishop anticipates displaying the second at least one medical decision (**Bishop**, c 7, l 39-44).

**Claim 66**

Bishop anticipates wherein the system comprises a host computer and at least one portable computing device (**Bishop**, c 6, l 40-44).

**Claim 67**

Bishop anticipates at least one computing device is linked to a medical instrument (**Bishop**, c 5, l 58-65).

**Claim 68**

Bishop anticipates the at least one computing device is integrated with a medical instrument (**Bishop**, c 5, l 58-65).



***Conclusion***

14. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Gotzalczany et al, IEEE 0-7803-5662-4/99
- Herren et al, U. S. Patent 6,108,635
- Iliff, U. S. Patent 5,868,669
- Lapointe et al, U. S. Pub 2001/0023419
- Lapointe et al, U. S. Patent 6,678,669

15. Claims 1-72 are rejected.

***Correspondence Information***

Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,  
Washington, D. C. 20231;

Application/Control Number: 09/690,354  
Art Unit: 2121

Page 9

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of  
"Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

Receptionist, Crystal Park II

2121 Crystal Drive,

Arlington, Virginia.

A handwritten signature in black ink, appearing to read "Joseph P. Hirsh", with a large, stylized loop at the end.

Joseph P. Hirsh

March 18, 2004